

# Instructions



## WTSI558-A Work Truck Shift Interlock

2020 - 2022 Ford F250-F600

2021 - 2025 Ford E-Series

2021 Ford F650/F750

Contact InterMotive for additional vehicle applications.

## System Overview

The WTSI558-A is a Work Truck Shift Interlock which can prevent a vehicle from shifting out of Park when various equipment is not properly stowed. Any number of switches on stabilizers, booms, cranes, equipment doors, and so on may be used to lock the vehicle's transmission shifter in Park to ensure the vehicle is not inadvertently driven in an unsafe condition.

## Installation Instructions

**Disconnect vehicle battery before proceeding with installation.**



**WARNING**  
Disconnect the battery to  
prevent setting a check engine  
light.

### IMPORTANT — READ BEFORE INSTALLATION

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers.

Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays and solenoids when installing upfitter circuits.

## CAUTION

All electronic products are susceptible to damage from Electrostatic Discharge or ESD. Ground yourself before handling or working with the module and harnessing by first touching chassis ground, such as the barrel of the cigarette lighter.



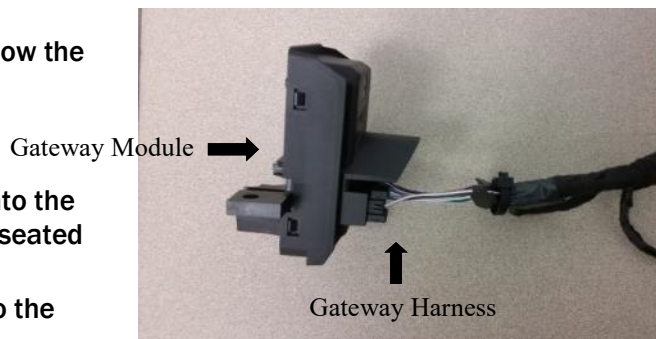
## WTSI558 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the WTSI558 module. Locate the module in an area away from any external heat sources (engine heat, heater ducts, etc.). Do not mount the module until all wire harnesses are routed and secure. The last step of installation is to mount the module.

# Instructions

## Ford 24-pin Data Link Harness (6-pin connector)

1. Locate the vehicles Gateway Module. It will be mounted below the lower left dash panel.
2. Remove the harness behind the Gateway module by pressing the locking tab and pulling outward.
3. Plug the Female side of the Intermotive Gateway Harness into the back of the Gateway module. Ensure the connection is fully seated and secured by the locking tab.
4. Plug the Male side of the Intermotive Data Link Harness into the Gateway harness.
5. Secure the WTSI Gateway harness so that it does not hang below the lower dash panel.



## Shift Lock Harness

1. Remove the upper and lower steering column covers by removing the 3 screws in the lower column cover.



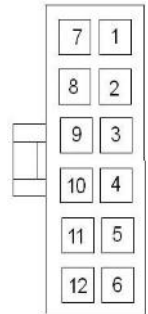
2. Locate the Shift Lock (4-pin) harness.
3. Unplug the Shift Lock connector.
4. Plug the OEM Shift Lock connector into the mating connector on the WTSI558 harness.
5. Plug the 4-pin connector on the WTSI558 harness into the mating connector on the OEM Shift Lock harness.



## Instructions

**Park output** - An optional “Park” output Orange wire is provided (pin 3), which indicates when the vehicle is in Park, and it is safe to operate equipment. This can be used as a “ground enable” signal, which enables the equipment for operation. This output can sink 1/2A. Adding an external relay can boost this current if needed.

**Shift Lock Control Input** - Applying +12V to the Blue Shift Lock wire (pin #11) will lock the transmission shifter, if in Park. This can be used to prevent the vehicle from driving when equipment has not been properly stowed. This can be connected to any number of grounding switches (connected in parallel) which can effectively “lock the vehicle down” when equipment is not properly stowed.



Current flow from this Shift Lock input through the switch(es) is very low (microamps). For optimum reliability, use switches intended for low current use.

### WTSI558 Module Mounting

Ensure all harnesses are properly connected and routed, and are not hanging below the dash area. Mount the WTSI558 module using screws or double sided tape and reinstall all removed panels.

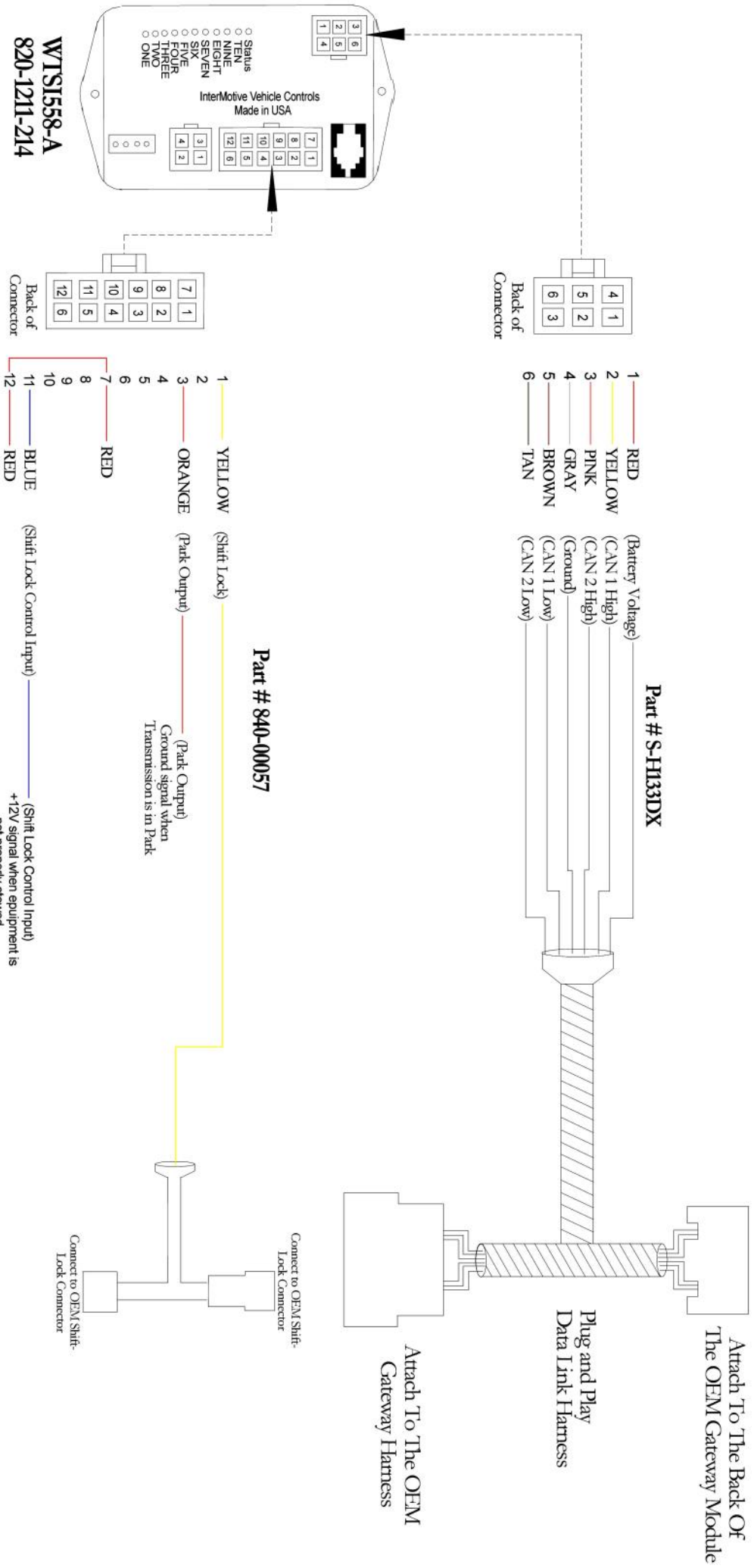
### Post-Installation Test (Ignition on)

The OEM system will lock the shifter in Park until the Service Brake is applied. WTSI558-A will further keep the shifter locked even when Service Brake is applied when the shift lock input Blue wire has +12V applied (equipment not stowed). Test system operation as follows:

If the Orange wire Park output is used, confirm equipment is not enabled unless the vehicle is in Park.

1. Apply +12V the Shift Lock input Blue wire by un-stowing equipment (12 Pin Connector Pin #11 Blue wire).
2. Verify that the vehicle will *not* shift out of Park when depressing the Service Brake.
3. Stow equipment and confirm Shift Lock is released by applying Service Brake and shifting out of Park.

**The WTSI558-A must pass this system test before the installation is complete.**



Attach To The Back Of  
The OEM Gateway Module

Plug and Play  
Data Link Harness

Attach To The OEM  
Gateway Harness

Connect to OEM Shift-  
Lock Connector

Connect to OEM Shift-  
Lock Connector

**Submit product registration at [www.intermotive.net](http://www.intermotive.net)**

If the WTSI558 fails any step in the Post Installation Check List, review the installation instructions and check all connections.  
If necessary, call InterMotive Technical Support at (530) 823-1048.